REMARKS

In the subject Office Action, the examiner rejected Claims 1-3 and 5 under 35 USC 102(b) as being anticipated by Norton '352, and rejected Claims 4 and 6 under 35 USC 103(a) over Norton '352 in view of Wallace '858. Applicants request reconsideration of their application in view of this response, which amends the claims and presents argument in support of the patentability of the amended claims.

In amending the claims, Applicants have essentially incorporated the limitations of Claim 2 (now cancelled) into base Claim 1. Accordingly, Claim 1 now recites a method in which the free mass of a vehicle occupant is determined based on a variation of the measured occupant seat weight with respect to a variation of the vertical acceleration of the vehicle, and a threshold to which the filtered seat weight signal is compared is adjusted based on the determined free mass. The threshold is adjusted below a default value when the determined free mass is above a predetermined range of values corresponding to an average weight occupant, and above the default value when the determined free mass is below the predetermined range of values. As demonstrated below, this method is neither anticipated nor obviated by the cited references.

Neither Norton '352 nor Wallace '858 determines the free mass of the vehicle seat occupant. Wallace is not even relevant to the subject. Norton is relevant to the extent that he determines a variation of the vertical acceleration of the vehicle and a corresponding variation of the indicated occupant weight. Nevertheless, Norton does not determine the free mass of the vehicle seat occupant. Instead, Norton uses the signal variations to "distinguish between an adult and a child seat tightly held by seat belts"; see column 16, lines 3-16. Specifically, Norton compares the change in acceleration (i.e., "the ratio of the change in vertical acceleration to the acceleration of gravity") to the change in occupant weight (i.e., "the ratio of the change in the weight estimated by the seat occupant weight sensing systems"); see column 16, lines 30-33. If the acceleration ratio is approximately the same as the weight ratio, the microprocessor concludes that the

occupant is a normally seated person, and the measured weight can be trusted; see column 16, lines 22-30. If the acceleration ratio is substantially greater (by a factor of two or more, for example) than the weight ratio, the microprocessor concludes that the occupant is a tightly belted child seat; see column 16, lines 30-37. This is not equivalent to or anticipatory of determining "the free mass of the occupant based on a variation of said output signal with respect to a variation of the measured vertical acceleration", as recited in Claim 1. See the ratio $\Delta PS/\Delta ACCEL$ in equation (4) on page 7 of Applicants' specification. Moreover, Norton does not teach adjustment of a deployment enable threshold based on occupant free mass. Per Claim 1, the deployment enable threshold is adjusted above or below a default value when the determined free mass is respectively below or above a predetermined range of values corresponding to an average weight occupant. When the free mass of an occupant is above average, the threshold is adjusted below the default value; this increases the likelihood that air bag deployment will be enabled. When the free mass of an occupant is below average, the threshold is adjusted above the default value; this decreases the likelihood that air bag deployment will be enabled. There is no anticipatory teaching or even suggestion of this in Norton (or in Wallace). Accordingly, Norton cannot possibly anticipate the subject matter of amended Claim 1, and Applicants therefore request that the rejection of Claim 1 and dependent Claims 3-6 be withdrawn. Claims 1 and 3-6 are believed to be in condition for allowance, and such allowance is respectfully requested.

Respectfully submitted,

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